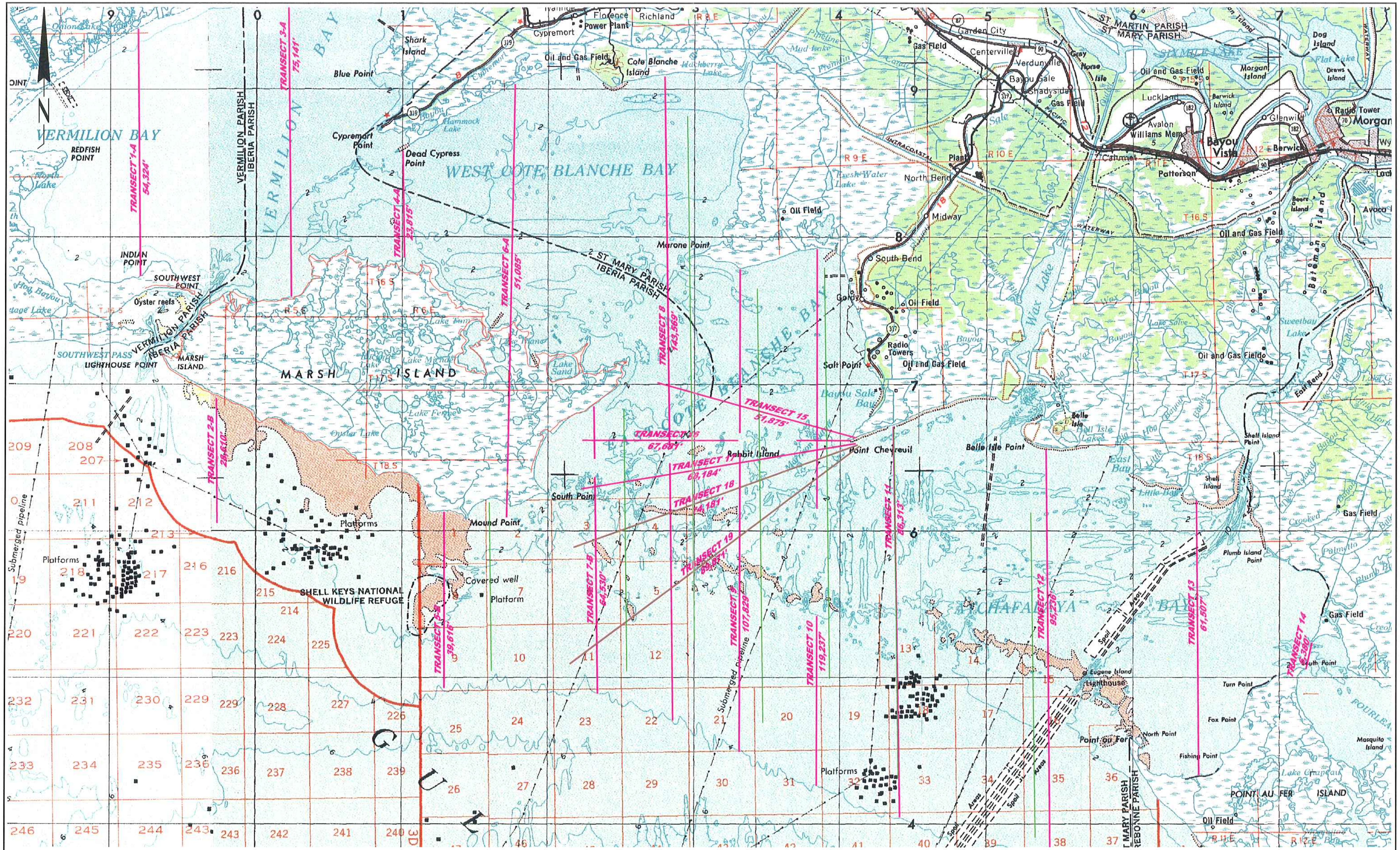
3. SURVEYING PROGRAM

3.0 SURVEYING PROGRAM

Bathymetric survey data was generated by John Chance Land Surveys, Inc. for incorporation into the modeling and engineering efforts associated with the project. The project team was informed on several occasions that the existing bathymetric data as shown on NOAA navigational charts were unreliable due to significant changes in the area. For this reason it was decided to undertake a surveying program to acquire existing conditions data in the Acadiana Bays area. After considerable discussion amongst the project team a set of nineteen transects was derived encompassing the bays area extending from the western side of Vermillion Bay to the eastern side of Atchafalaya Bay (Reference Figure 3-1). Most (14) of these transects were oriented in a north-south direction. A tighter grid of transects (5) was derived in order to obtain more detailed and site specific data on the area between Point Chevrieul generally westward toward Marsh Island. These five transects all originated at Point Chevrieul extended generally to the west (WNW to SW). The specific data would prove useful as that is the area of the bays system deemed most likely to provide opportunities for reef restoration meeting the project goals and objectives.

Horizontal points along all transects were set using GPS coordinates. The vertical datum used for the project was NAVD 1988.

The 3-D data points were then electronically transmitted to NELSON. At NELSON these transect data were entered into AutoCAD and processed using Eagle Point Surface Modeling and Surfer contouring software packages. These contours were compared to contours from historical USGS quadrangle maps and a reasonable match was made. Subsequent 2-D contour plots were elevated in AutoCAD to a 3-D format allowing for quantity estimates on reef construction material.



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		REVISIONS			

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DESIGNED BY:	—	REGISTRATION NO. —	STATE: —
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ACADIANA BAYS REEF RESTORATION
FEASABILITY STUDY

FIGURE 3-1
SURVEY TRANSECTS IN ACADIANA BAYS

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